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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,759	12/02/2003	Kees Smeechuyzen	5-0229-001	6777

803 7590 06/15/2005  
STURM & FIX LLP  
206 SIXTH AVENUE  
SUITE 1213  
DES MOINES, IA 50309-4076

EXAMINER

ENSEY, BRIAN

ART UNIT PAPER NUMBER

2646

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/725,759	SMEEHUYZEN, KEES	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian Ensey	2643	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 21-27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/20/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: See page 5, line 23, "clothing 100". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The abstract of the disclosure is objected to because line 9 of the abstract refers to "directional hearing (48)(48)". Reference numerals "48" could not be found in either the specification or the drawings. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimi U.S. Patent No. 5,511,132 in view of Fukada Japanese Patent Application Publication 11-215581.

Regarding claim 1, Yoshimi discloses a bone conducting communication apparatus comprising: an earphone unit and an electronic control unit including an electronic control member (20) operatively connected to the microphone/speaker unit (32) and further provided with an on/off switch (33) and means for positioning the electronic control member on a selected article of clothing worn by the user (See Figs. 1 and 2 and col. 4, lines 28-53). Yoshimi does not expressly disclose a bone conducting headset apparatus. However, a bone conducting headset apparatus are well known in the art and Fukada teaches a bone conducting headset apparatus comprising a headset unit including an adjustable spring biased headset member including an adjustable length head strap (2) and a neck strap (1) provided with a spring biasing member wherein, the head strap has opposite ends that join the neck strap in a generally perpendicular fashion; a microphone speaker unit including at least a pair of speaker/microphone members including an inner bone conducting component (3) and an outer environmental noise component disposed at one end of the junctures between the head strap and the neck strap wherein, the at least one speaker/microphone member is disposed in intimate contact with the wearer's head bone (4) (See Fig. 1 and translation paragraphs 0008-0011). Fukada also teaches an output cable (7) for connection to external devices (See paragraph 0011). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the control unit of with the

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headset of Fukada to allow the user to control the use of the headset mounted in multiple articles of clothing and when used multiple operating situations (See Fukada paragraph 0015).

Regarding claim 2, Yoshimi further discloses the electronic control member is further provided at least in part with at least one dial (27) that controls audio amplification and/or audio reduction (See col. 3, lines 17-22).

Claims 3-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimi in view of Fukada as applied to claim 1 above, and further in view of Schreiber U.S. Patent No. 4,791,673.

Regarding claims 3 and 4, Yoshimi further discloses the electronic control member is further provided at least in part with a switch having a first push to talk position and a listen only position (See col. 3, lines 24-62). Yoshimi does not expressly disclose a third position for an intercom function. However, the use of bone conduction headsets as intercoms is well known in the art and Schreiber teaches a bone conduction headset for two way communication and for use as an intercom system. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the bone conduction headset of Yoshimi as an intercom in noisy conditions (See Schreiber col. 7, lines 29-36).

Regarding claims 5-8, Yoshimi further discloses the electronic control member is further provided with high noise cut-off means wherein, noise above a preset decibel level will not be transmitted through the at least one speaker/microphone member (See col. 4, lines 6-12).

Regarding claims 9-14, Yoshimi does not expressly disclose the electronic control member is operatively connected to a pair of microphones for directional hearing. However, the use of microphone pairs for directional hearing is well known in the art. Official Notice taken. It

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would have been obvious to one of ordinary skill in the art at the time of the invention to use a pair of microphones for directional hearing in the device of Yoshimi to allow the user to easily determine the sound source.

Regarding claims 17-19, Yoshimi discloses a headset as claimed . Yoshimi does not expressly disclose the microphone/speaker unit comprises a pair of speaker/microphone members wherein, both said pair of speaker/microphone members are disposed at the juncture of the head strap and the neck strap. However, the use of a pair of speaker/microphone members wherein, both said pair of speaker/microphone members are disposed at a common point equivalent to the juncture of the head strap and the neck strap is well known in the art. Official Notice taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to place both devices in close proximity for easy access.

Claims 15, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshimi in view of Fukada as applied to claim 1 above, and further in view of Fukada U.S. Patent No. 6,456,721.

Regarding claims 15 and 16, Yoshimi discloses a headset as claimed. Yoshimi does not expressly disclose the microphone/speaker unit comprises a pair of speaker/microphone members wherein, both said pair of speaker/microphone members are disposed at the juncture of the head strap and the neck strap. However, Fukada ('721) teaches a pair of speaker/microphone members (See Fig 4, items 1 and 2a) wherein, both said pair of speaker/microphone members are disposed at a common point equivalent to the juncture of the head strap and the neck strap of Yoshimi. It would have been obvious to one of ordinary skill in the art at the time of the invention to place both devices in close proximity for easy access.

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Regarding claim 20, Yoshimi discloses a headset as claimed. Yoshimi does not expressly disclose at least one of the speaker/microphone members includes a boom microphone element. However, Fukada ('721) teaches a boom microphone element (See Fig 3).. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a boom element to locate the microphone closes to the mouth of the user.

### *Allowable Subject Matter*

Claims 21-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703) 872-9306, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to: Customer Service Window, Randolph Building, 401 Dulany Street, Arlington, VA 22314

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BKE

June 8, 2005

  
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SUPERVISORY PATENT EXAMINER  
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